

## ABSTRACT OF THE DISCLOSURE

An offline programming system making it easy to perform operations for correcting a positional deviation produced when a program, to which taught points have been added or position/orientation modifications have been made offline, is applied to a robot. A program P1 prepared by the offline programming system is applied to the robot, and a program P2 for which corrections of position deviation have been made is read in from a robot controller. Correction amounts E are each determined from a position/orientation deviation between corresponding taught points of the programs P1, P2. A program P3 is obtained by adding taught points to the program P1 or modifying taught points thereof. Expected correction amounts for the added or modified taught points are each calculated from the correction amounts of existing taught points near the position of the added or modified taught point. A program P4 obtained by modifying taught points in the program P3 using corresponding correction amounts is output to the robot controller which can easily correct actual position/orientation deviations because even the added or modified taught points have been modified with the expected correction amounts.